# DIPHENYLHYDANTOIN IN POST-HEPRETIC NEURALGIA

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Thirty patients, all above 50 years of age, with herpes zoster were treated with dipheny-lhydantoin, 100 mg twice daily for 10 days. The incidence of post-herpetic neuralgia was compared with that of post-herpetic neuralgia in another group of 30 patients treated with conventional analgesics, antacids, antihistamines and antibiotics. In the study group, only 20% of the patients developed neuralgia as against 80% in the control group.

Key words: Post-herpetic neuralgia, Treatment, Diphenylhydantoin.

Post-herpetic neuralgia (PHN) is thought to be caused by the degenerative changes in the sensory nerve as a result of the acute phase of the viral infection. It is more common in the older patients, and moderate to severe pain persists for more than two months in as many as 70% of patients.<sup>1</sup> This study was conducted to find out the usefulness of diphenylhydantoin in PHN.

### Materials and Methods

Two groups, each consisting of 30 patients above 50 years of age with herpes zoster of various dermatomal segments were selected for this study. The first group was used as the control group and treated with conventional analgesics, antacids, antihistamines and antibiotics where necessary. The second group was the study group and treated, in addition to the above, with diphenylhydantoin 100 mg twice daily orally for 10 days. The incidence of PHN in each group was noted during a follow-up period of 3 months.

#### Results

In the control group, 24 (80%) patients developed moderate to severe degree of PHN which persisted for more than a month. The remaining 6 patients experienced a mild pain which persisted for 7 to 14 days after complete

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healing of the lesions. In the study group, only 6 (20%) patients developed PHN of a mild degree lasting for less than 10 days. The remaining 24 patients were absolutely pain-free after healing of the skin lesions. No side effects except for a slight drowsiness were experienced by the patients treated with diphenylhydantoin.

#### Comments

Various methods have been tried for the treatment of PHN. Electrical stimulation,2 surgical and chemo-surgical techniques have given variable results.3,4 In an attempt to minimize or prevent PHN, early use of high doses of corticosteroids has been advocated,5 although one should remember that corticostcroids can interfere with the development of lifelong immunity which develops after herpes zoster. Carbamazepine was found to be useful in a recent study.6 In the present study dipheny-Ihydantoin was useful in the prevention of PHN as well as in reducing the severity of PHN. The exact mode of action of diphenylhydantoin, a bio-electrical stabilizer, in PHN is not known. Although diphenylhydantoin has been reported to be useful in the prevention of PHN, the effectiveness of the drug is not known to have been compared with a control group.7

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